

RANKEN

TECHNICAL COLLEGE

COURSE INFORMATION

Course Number: INT 1113

Course Name: Industrial Mechanical Systems Theory

CREDIT-BY-ASSESSMENT (CBA) COMPETENCY LIST

- List two types of automotive air conditioning systems, their components and explain how Identify and explain the use of common hand tools including, but not limited to, variations on pliers, micrometers, dial calipers, screwdrivers, and wrenches used in the mechanical maintenance field.
- Solve math formulas used to:
 - Calculate part dimensions.
 - Interpret speeds and velocities of gear, belt, and chain drive systems.
 - Interpret blueprints.
 - Sling angle and load calculations.
- Understand the selection, application, and maintenance of bearings, gears, v-belts, roller chains, sprockets, sheeves, direct shafting, fluid transfer valves, and centrifugal pumps.
- Evaluate and explain proper rigging procedures.